



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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GOVERNOR

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SECRETARY

**North Carolina Board of Transportation
Environmental Planning and Policy Committee
Meeting Minutes for April 6, 2005**

A meeting of the Environmental Planning and Policy Committee (EPPC) was held April 6, 2005 at 8:30 AM in the Board Room (Room 150) of the Transportation Building. Board Member Nina Szlosberg chaired the meeting. Other Board of Transportation members that attended were:

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| Tom Betts | Conrad Burrell |
| Bob Collier | Marion Cowell |
| Nancy Dunn | Doug Galyon |
| Cam McRae | |

Other attendees included:

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| Victor Barbour | Mike Holder | David Robinson |
| Donnie Brew | Julie Hunkins | Roger Rochelle |
| Mike Bruff | Berry Jenkins | Anthony Roper |
| Clarence Coleman | Don Lee | Andrew Sawyer |
| Craig Deal | Sharon Lipscomb | Joel Setzer |
| Greg Dean | Becky Luce-Clark | Greg Smith |
| Steve DeWitt | Ehren Meister | John Sullivan |
| Tom Drda | Mike Mills | Charles Tomlinson |
| Dawn Garrison | Jon Nance | Don Voelker |
| Carl Goode | Sandy Nance | Marcus Wilner |
| Rob Hanson | Ken Pace | |
| Teresa Hart | Mike Pettyjohn | |

Ms. Szlosberg called the meeting to order and accepted a motion to approve the meeting minutes from the March committee meeting with the addition of Mr. Eddie Dancausse with the Federal Highway Administration to the attendance list. The minutes were approved.

Ms. Szlosberg began by commenting that it was exciting to see some of the seeds the EPPC had planted begin to sprout, specifically today's topic - the Green Contracting Program. Approximately a year ago, the board first discussed encouraging those the DOT does business with to practice the same kind of environmental stewardship that the DOT has been promoting in the department.

Ms. Szlosberg then introduced Mr. Steve DeWitt, Director of Construction, to give an update about what we have been doing with regard to Green Contracting and how we can aggressively move things forward. She then turned the floor over to Mr. DeWitt.

Mr. DeWitt presented a PowerPoint slide show entitled “Green Contracting for Highway Construction.” He began by reviewing the presentation agenda and stated that his objectives for the meeting were to define Green Contracting and to provide some vision and goals for it. Mr. DeWitt mentioned that these goals came out of the EPPC’s November 2003 discussion on Green Contracting. He also intended to talk about what is happening nationally and within North Carolina, and then lastly talk about where we are heading today.

What is green contracting?

Buildings : *Resource Efficient Buildings*

Mr. DeWitt began by introducing the term Resource Efficient Buildings. He commented that this is a term that is prevalent in the building construction world. The construction industry is very focused on green buildings, contracting, and construction. You don’t see it quite so often in the highway world yet. This is a process of looking at resource efficient buildings through design, construction, implementation, long term maintenance, evaluation of material, recycling and renewable resources, and making sure the building fits within the community. Before a building or structure is torn down, one should make sure that it can’t fit in better as it is, with some enhancements. There may also be some lower overall operating and maintenance costs.

What is green contracting?

Highways : *Resource Efficient Highways*

Mr. DeWitt then stated that he had taken that same definition and changed it to envision what a highway green contracting concept would look like. He called it a “Resource Efficient Highway.” He commented that there are a lot of things that are done inherently in the highway design process that could help with an energy efficient construction process. For example, if we had on-site waste areas at our projects, that would prevent our contractors from having to haul material to off-site waste areas. This could decrease fuel costs, reduce safety issues, and so on. He mentioned that we do a lot of utilizing construction materials wisely, including recycling, in our contracts. Our contractors are quite innovative in trying to find economic ways to recycle and reuse products. Life cycle considerations are also very important. If we were able to build a highway today that would last 30 years without appreciable reconstruction costs, that would certainly save materials, fuel, and other things. Certainly minimizing impacts to the environment to the maximum extent practical needs every consideration, as well as ensuring that projects be considered in terms of the overall impact to a given community.

Goals of Green Contracting Program for Highway Construction

Mr. DeWitt introduced the goals for Green Highway Construction:

- Reduce Emissions Through Incentives
- Evaluate Role of Contracting Industry in Conformity Plans
- Encourage Contracting Community to “Continue Greening” Process
- Evaluate Success of Erosion & Sedimentation Control, Recycled Materials, & Permitting
- Evolve Green Design Development Processes.

Mr. DeWitt stated he believes there are many things we do now that are second nature to us, but as we design a project these concepts need to be part of the process.

National Highway Initiatives

Mr. DeWitt noted that as he looked and talked with his contacts with AASHTO Headquarters and Federal Highway Administration (FHWA) Headquarters, there was not a lot out there in the highway world to put under the umbrella of Green Contracting. He commented that this is very much a developing concept. There is a forum that FHWA is putting on this September that appears to be the first real national attempt to get their arms around the green contracting concept. In the past, the activities have primarily been concentrated around erosion and sedimentation control. For a long time this has been a major emphasis area, along with recycling and general environmental stewardship. One area they have focused on at length is the Environmental Protection Agency (EPA) and diesel emissions issues. Internationally, in Europe for instance, they are way ahead of us in this concept. They have a lot of ISO14000 certification type processes in place that give some level of assurance that a contractor or process meets a certain level of environmental quality.

Diesel Emission Issues

Mr. DeWitt commented that this is one issue that the Associated General Contractors of America (AGC) is engaged in. The EPA put out a report late last year which focused on how to reduce diesel emissions. There are a lot of issues with diesel engines. Certainly they are a predominant power mechanism in highway construction. Any big piece of equipment you see is driven by a diesel engine. Rail locomotives are by and large driven by diesel engines. According to the EPA, it is a major source of pollution and their area of interest here is to reduce those emission levels. Mr. DeWitt pointed out that this kind of equipment lasts a *long* time. There are some cranes out there from the 1950's that are still in use. Part of the EPA's concern is that emissions standards from 1950 were much different from today's, and it literally takes decades for emissions standards to find their way into the contractors' working equipment.

Strategies for Reducing Diesel Emissions

Mr. DeWitt introduced some strategies the EPA has recommended to look at this particular issue. These Technical Strategies include:

- Retrofit,
- Engine Replacement
- Alternative Fuels
- Equipment Replacement
- Repair/Rebuild Engines.

Each strategy has a cost associated with it. This equipment is not cheap to replace or retrofit. It could be on half million dollars or more, which the contractor has to absorb. Mr. DeWitt made another point about diesel engines, which are often left idling at construction site. One operational strategy has been to target idling reductions.

Diesel Emission Reduction Encouragement Efforts

Mr. DeWitt then addressed how the EPA is trying to find ways to encourage the contracting industry to move toward more efficient emission type equipment. He commented that there are some voluntary retrofit programs, grant programs are given by some states, and one suggestion

was for tax incentives through exemptions, deductions, and credits for contractors who convert some of their equipment. Mr. DeWitt noted that another option would be to use modified contracting procedures, using specifications, preferences, and allowances within the contracts. There may be costs associated with this approach. Also, the implementation of Environmental Management Systems might have some benefits, possibly without as much cost.

What is an EMS?

Mr. DeWitt then defined the term Environmental Management System (EMS), which may be considered as the organizational structure and associated responsibilities and procedures to integrate environmental considerations and objectives into the ongoing management decision-making processes and operations of an organization. It is the thought process of keeping environmental issues on the front burner as part of organizational planning.

Mr. DeWitt referred to the ISO14000 process and to the ISO9000 process, international environmental and quality standards, respectively. He informed the BOT that these are auditing processes such that if you meet the ISO standard you have really met a very high standard of quality. The ISO14000 series focuses on different elements of environmental responsibility. It is a very stringent process but the theory is that once you have met this benchmark, that 'you are there' in terms of your environmental stewardship philosophies. Mr. DeWitt commented that he understands that the DOT has begun to implement ISO14000.

AGC-EPA Initiative

Mr. DeWitt mentioned that the EPA and AGC are working together on the Incentive Program to promote early conversion to low emission diesel engines, but they are still developing the process. Mr. DeWitt emphasized that the AGC needs to be engaged because all the equipment issues mentioned are predominant throughout the highway contracting industry, the building contracting industry, private industry, and public industry. Mr. DeWitt noted that the EPA partnership is focused on three things: (1) improving environmental regulations, (2) expanding the use of environmental management systems, and (3) exploring ways to assess environmental progress (to measure how well we do in certain areas).

Role of Contracting Industry in Conformity Plans

Mr. DeWitt commented that he struggled with the topic of the contracting industry and air quality conformity plans. He talked extensively with Mr. Berry Jenkins, AGC representative, regarding this topic, which was one of the assignments from the November 2003 EPPC meeting. In trying to determine how best the industry can fit within the concept of conformity plans and what they can do, equipment registration is one factor which Mr. Jenkins mentioned. Equipment registered in a given county may actually operate in another county. The air quality tabulations in that county are then affected, even if the equipment is operated in another county. So encouraging contractors to register in the county their equipment operates is one thing that AGC has talked about that may be an appropriate way to help.

Mr. DeWitt also used the hours of fueling as an example. Ray Contracting in Charlotte mentioned that an easy thing for them to do is just change the hours in which they fuel equipment. If they can do it very early in the morning as opposed to mid-day or in the afternoon,

it can make an impact on the air quality in a given area. They are just doing that because they realize it is the right thing to do.

What Are We Doing In North Carolina?

Mr. DeWitt provided a quick update on some of the things that NCDOT is already doing. He commented that overall NCDOT is a national leader in terms of environmental stewardship. We have done so many things and come such a long way in the past 10 years or so that many states really look at us, at our programs, at our processes and best practices, and at the kinds of things that we do.

Mr. DeWitt then stated that he would talk briefly about green design concepts, construction recycling, and construction techniques we use to make sure that we have green in mind.

I-26 in Madison County

Mr. DeWitt informed the EPPC that this project always came to his mind first when he thought about NCDOT and the things that we have done really, really well. This project was constructed over a period of about 6 years. There were two major grading projects on this corridor, along with a paving project. In the movement of the earth, NCDOT literally moved mountains as we built this project. There was a lot of potential to cause severe problems from an environmental standpoint if the project was not handled carefully. NCDOT went into this project realizing we would do a lot of things trying to set up a contract and contracting process to ensure that we were doing the right thing. But what this project really boiled down to is a illustration out of the division by a resident engineer, Mr. Stan Hyatt, who was 100% focused on the environmental issues of the project. Mr. Hyatt understood the concern of the community as well as the need to comply with environmental regulations. He understood all the eyes and ears of North Carolina were out there watching what was happening in this corridor. And after all is said and done, with \$200 million spent, this project has an impeccable environmental record. Mr. DeWitt highlighted some of the successes.

- **Stream Restoration**

Mr. DeWitt stated that one of the things that we did was a stream restoration. One of the first, Mr. DeWitt believes, that was done really well here in NC, was done hands-on by Mr. Hyatt and his colleagues. They paid a lot of attention to the restoration process and the wildlife. This stream, which one might consider a very small part of the project, had a lot of emphasis put on it to make sure that it happened right.

- **On-Site Waste Areas**

Mr. DeWitt commented that this project had two on-site waste areas. We did this for two reasons. One was the economics of it. We also realized that if we could get some large areas close to the project for waste we might be able to utilize those areas somewhere down the road for a buckle center or other function, and have better control over the environmental responsibilities.

- **On-Site Rock Crusher**

Mr. DeWitt stated that the contractor, because of the rock quantity and quality, brought a rock crusher on site and crushed rock for ABC, for riprap, and for rock embankment. The crushed rock met our quality requirements. The contractor was able to utilize rock that typically would have been wasted. NCDOT didn't have to bring in rock material

from a quarry. The economics were there. The environmental responsibility and benefits were there as well.

- **Impeccable Environmental Record**

No Immediate Corrective Action's (ICAs) nor Notices of Violation's (NOVs) were issued. Mr. DeWitt commented that one thing that really stood out was the fact that with all of the potential bad things that could have happened, NCDOT never received an ICA. During six years of construction, not one single ICA was given on the project, which was really a monumental achievement. Nor were any NOVs given by any public environmental agencies. (An ICA is a self-policing program within the NCDOT - it's a check & balance system to ensure that we are doing the things we are supposed to be doing from an environmental stand-point;. An NOV is a violation citation given by an outside agency).

- **Stream Quality Monitoring**

Mr. DeWitt stated that NCDOT measured the quality of the streams through this corridor year after year. We measured what the effect of the construction was. If the resident engineer saw a spike in the turbidity level (the level of particulates in the water) he could find out if the problem was due to construction activities or further upstream, logging or something else perhaps.

- **Constant Attention to Environmental Details**

Mr. DeWitt praised the efforts of Mr. Hyatt and his team and emphasized the importance of their constant attention to environmental details, which is what made this project so outstanding.

Green Design

Mr. DeWitt commented that we have not always focused on green design, but many of the things that we have done (the earth work design, the waste areas of projects, balancing cuts and fills to make sure that materials were being utilized to the greatest extent within the project corridors) are the kinds of things that come to mind within the concepts of green contracting. We did them because it was economical, it improved safety, and it was a responsible thing to do. NCDOT has found areas which are not necessarily traditional waste areas in which to put waste; we might do a lot of things that would utilize that waste within the construction corridor. Landscaping considerations have helped bring a sense of community to our projects. The whole concept of Context Sensitive Solutions also falls under the Green Contracting umbrella.

LEED Certification

Mr. DeWitt spoke about a rest area that NCDOT is designing which follows the LEED certification program. LEED is a national organization which has developed a green design process to reuse and recycle and look at indoor environmental quality. There are 7 key aspects which should provide a better life for the inhabitants of that building based on how we design the building. The Wilkes Co. Visitor's Center, which is in design right now, is being designed to LEEDs standards. NCDOT is aiming to meet the platinum level of LEEDs design.

Recycled Materials

Mr. DeWitt emphasized that there are many products that are used today that are part of NCDOT's everyday processes because they are now economical, but they didn't necessarily start out that way. Some recycling initiatives have been pushed along in spite of resistance due to the

cost. But they have worked their way into the process and have become economical and standard practice. For example:

- Reinforcing Steel - 100% of reinforcing steel is manufactured from scrap steel
- Approximately 50% of approved plant mixes contain recycled asphalt
- Shingles are incorporated in asphalt mixes

Waste Tire Utilization

Mr. DeWitt noted that NCDOT has used waste tires in all kinds of things - in retaining walls, to crack sealant, to guardrail mats, and to other products all over the state.

Recycled Plastic Guardrail Offset Blocks

Mr. DeWitt commented that this was one innovation which had to be forced to be incorporated. Typically wood offset blocks have been used on guardrails, which can crack and actually fall out or hurt the performance of the guardrail. So NCDOT tried to find a more economical way, a better lifecycle way of having some product there, and this is what came out. Recycled plastic guardrail offset blocks have become the standard in NC.

Waste Glass Utilization

Mr. DeWitt pointed out that waste glass is in all kinds of places. Many states have been experimenting with waste glass. It has been added to all our pavement markings, and there are some other things that you can use it for. However, there have been some issues in using it with asphalt. It doesn't always mix well, but it can work well in some composites.

Fly Ash Utilization

Mr. DeWitt noted that fly ash is one of those waste products that is reused a lot. It is a really good product with limits. This is a by-product of the coal-burning process. Power plants use coal to create energy. It is basically the ash left over from that process. It is a concrete additive and is used in most of our concrete mixes as a substitute for cement.

Green Construction Techniques

Mr. DeWitt proudly touched upon the Erosion & Sedimentation Control Program. NCDOT has developed a national model to deal with highway construction projects.

Green Construction Erosion & Sedimentation Control

Mr. DeWitt also congratulated Mr. Don Lee, his team, and all the divisions working on this program for the tremendous amount of time effort that has gone into making sure that NCDOT does the right thing regarding erosion and sedimentation. The results speak for themselves.

TURBIDITY Requirements – Borrow Pit Dewatering

Mr. DeWitt then discussed borrow pit dewatering problems, which have been primarily an issue in the eastern part of the state with turbid soils where there is a lot of particulate matter floating around in the water. The challenge has been how avoid dumping high levels of turbidity into less turbid waters when pumping water out of borrow pits. We did a lot of research trying different mechanisms to try to find a way to deal with that issue. The process has been improved to the point that we are at least reasonably satisfied with it. We spent a lot of money making sure that the effluent coming out of the borrow pits meets reasonable turbidity levels. There has

been some research behind what we do, and Mr. Lee likes to push this a lot. There are ways to apply science to NCDOT's improvements, to show the actual benefits of some of the things that are being done environmentally, and to show that it's the right thing to do.

NCDOT Water Quality Monitoring and Research

Mr. DeWitt then discussed water sampling in project corridors. For example, for the Knightdale and Charlotte Bypasses, NCDOT took measurements upstream and downstream and made comparisons of what the construction impacts on the stream quality have been over a period of time. Basically there was no statistical difference in water quality up stream and down on either project. An outside source stated that the "water quality data collected from this [Charlotte Bypass] project indicates that the NC DOT has done an excellent job of preventing sediment from leaving the I-485 construction site."

Borrow Pits – Lateral Effects

Mr. DeWitt referred to a report provided by the US Army Corp of Engineers (USACE) that requires any borrow pit to be 400' from any jurisdictional water. Their theory was that if you dug a borrow pit and pumped water out any jurisdictional waterway would also drain down. NCDOT had some concerns about that because of the huge financial impact. Dr. Scagg, a professor from NC State, helped develop a process that, based on science, has cut that number from 400' to about 100' which is reasonably satisfactory. The research and science resulted in the USACE's acceptance of NCDOT's proposed alternative with certain conditions.

Contract Incentives

Mr. DeWitt explained that contractual techniques are used to encourage the industry to be proactive with Green Contracting. Incentives exist on some very large grading projects, and NCDOT offers incentives in design/build projects for reducing the impacts to wetlands and streams.

Bridge Construction Methods

- **Work Bridges in Lieu of Causeways**
Mr. DeWitt explained that, traditionally, DOT would have constructed access to a project site by putting a few pieces of pipe in over a stream, filled it over with rock, and called it a causeway. You can imagine how that waterway would impact the water quality downstream. Today you see examples like the Knightdale Bypass and the Haw River where temporary construction bridges were built. Workers drove cylinder piles in a fairly non-intrusive manner and then built a bridge on top of that. When they are done with construction, they can pull them back out. This eliminates having to walk out or use equipment in the wetland or sensitive areas. They built the permanent bridge from the temporary bridge as they went and took debris back out on the temporary bridge as they backed up.
- **Drilled Piers & Composite Piles in Lieu of Jetting**
Mr. DeWitt discussed drilled shaft piers. This is an example of putting a foundation in that has minimal impact on the environment. Workers place a sleeve, a drill rig drills a hole, concrete is placed, and that becomes the foundation of the bridge.
- **Top Down Construction**

Mr. DeWitt explained top down construction. This is where a bridge gets built as you go. A crane is placed on top. Workers put the substructure in, then build a piece of the superstructure, take a step forward onto the new superstructure, place more substructure, place the superstructure, and advance along, building that bridge from the top. This method is used quite often today. This construction technique benefits the environment greatly when working over sensitive areas.

- **Vacuum System for Capturing Sediments**

Mr. DeWitt commented on a process conceived and implemented by an NCDOT Resident Engineer's office to address an environmental issue. When workers jet piles, if you can envision taking a garden hose and sticking it in the sand, the sand blows out. Basically, a high pressure jet is used to jet piles into the sound bottom or the ground. In that jetting process, as material is displaced, it goes places. That spoil material is captured within a silt fence. The issue is how to get that material out of there and restore the wetlands. The solution the engineers came up with was to use an existing device – a high pressure vacuum system - in a new way. They vacuum the material (spoil) out. This results in only a short-term impact to the environment since workers don't have a lot of equipment out in the wetlands. The vacuum hose goes in and is pulled back out, and you end up with a restored area that will in time re-vegetate.

Contractor Initiatives

Mr. DeWitt noted that the industry has been very innovative at trying to find ways to reuse materials within projects. For example, contractors on US1/64 in Cary have set up a crusher to crush the concrete which is coming out to be reused as base coarse material and to backfill undercut areas where the soil is bad. There are a lot of applications for recycling like that, and we see it more and more on our projects.

Asphalt Plant Production

Mr. DeWitt commented that asphalt plants are a really good example of where the highway industry's mindset is these days. The asphalt industry is a great example of how far they have come in just a number of years. Mr. DeWitt showed a slide from the early 1960's which clearly has emissions issues. Emissions at asphalt plants have decreased 97% over the last several decades. Asphalt is the #1 recycled construction product.

Where Are We Heading?

Mr. DeWitt wrapped up his presentation with the following comments. We will continue as a DOT to do the things we are doing. We have a strong environmental ethic. Erosion and sedimentation control, recycling, and permitting processes are in place and are under constant improvement. We believe we need to ensure proper corporate expenditure of funds – some of the products we use in recycling for instance, may be cost prohibitive initially, but may become cost effective because of their use and applications. We need to employ science as much as possible. There are a lot of issues that we really need some help with to help us know if it's the right thing to do environmentally and cost wise. To go forward with this, Mr. DeWitt believes we need to participate in the national dialogue which has just started in the area.

Ms. Szlosberg opened floor for questions.

Ms. Szlosberg asked Mr. DeWitt about how are we going about, in all of these different areas, measuring what we are doing and how that relates to what we have done in the past and any targets we might have set? Mr. DeWitt answered that as it relates to erosion control, we monitor and track that. We have scores of performance measures which show how well we have done and are doing. For recycling efforts, Mr. Rick Harbor and his team have been doing that for a while now, so we have a track record there. Tracking includes the products we used, the quantities we've used, where we've used them -- a lot of details that relate to that are available.

Ms. Szlosberg asked about NOV's and ICA's. Mr. DeWitt answered that we track the number of NOV's and ICA's.

Ms. Szlosberg asked how we measure who among our contractors are going above and beyond the regulations to implement environmental stewardship and green contracting principles? Mr. DeWitt answered no, we don't. The only thing Mr. DeWitt mentioned that would be complimentary to that would be the ISO14000 process. ISO14000 process is very rigorous and that may be one way to go about determining is a contractor is going above and beyond what is required.

Ms. Szlosberg asked if we have a kind of intuitive sense that we have a contracting community that is working with us on this, but we really aren't measuring who is doing it and how we might improve growth in that sector. Mr. Berry Jenkins, replied that he believes we talk about it as part of a pre-qualification index and there is an environmental index piece of that. He stated that he thinks you can measure who doesn't do it a lot more quickly than you measure who does do it. He thinks it does influence actions DOT has. He agreed with Mr. DeWitt in that you don't measure the people who are complying with what we think are now everyday institutionalized processes because they are just expected to comply.

Ms. Szlosberg asked when you perform a cost/benefit analysis, how are you measuring the externalities. Are you considering more than just the cost of the asphalt, for instance, and actually considering some of these other factors that also have environmental and economic impacts?

Mr. DeWitt answered that he thinks the Borrow Pit example he used was a great example of how, through a logical process of working with the Corps of Engineers, researchers at NC State, and the DOT staff, we were able to show that what we were being asked to do was economically and environmentally not the right thing to do. Through science, we were able to demonstrate that the alternative proposed by the DOT was the right thing to do both from an economical and environmental standpoint.

Ms. Szlosberg brought up the topic of emissions and diesel engines, which is a huge EPA/air quality issue. The Greater Triangle Regional Council has been doing a lot of work on diesel engines and how to look at what we've got going on in the Triangle area and how that might trigger a lapse in our pollution budget in the triangle. Ms. Szlosberg asked if Mr. DeWitt was working with that group at all? Mr. DeWitt answered I've been involved with bits and pieces of that. Ms. Szlosberg replied that she would connect Mr. DeWitt with Ms. Pam Wall in that group. Ms. Szlosberg commented that it may cost us more to incent cleaner burning engines, but

on the flip side, if you lose all your funding and you delay projects (due to lapsing on our pollution budget) it becomes a lot more cost effective to fund the incentives. Mr. Jenkins commented that some of the AGC equipment members are working very actively with that group and helping to get speakers in here. They are plugged-in. Maybe DOT individually is not, but their work is plugged in.

Ms. Szlosberg asked the EPPC what kind of instructions they wanted to give Mr. DeWitt and his group in terms of moving forward? Ms. Szlosberg summarized that the EPPC has asked Mr. DeWitt to look at the air quality issue, talk about it, and work with Mr. Jenkins and his colleagues to get a lay of the land. Mr. DeWitt suggested that NCDOT continue to engage in a national dialogue. He stated that we need the input of that bigger group, of knowing where the industry is going and suggested that the dialogue is really important. He also stated that it would take about one half year.

Ms. Szlosberg commented that she was thinking about a demand pull economic model of creating the demand within the department. She stated that NCDOT is 20% of the State Government and if we incent a certain kind of economic behavior environmentally, that helps push the economic side of things. Mr. Jenkins responded he thinks there are already efforts underway. Our National AGC hosted an environmental conference in Charlotte, NC with EPA last year. Mr. Jenkins was a moderator and Mr. DeWitt was a presenter. A big part of the conference centered around the things we've been talking about today. There are activities underway to do the kind of things you are thinking about. Part of that was educational outreach. With regard to the air emission budget, Mr. Jenkins stated that when a gentleman from Houston pointed out that when they were measuring the air emissions budget and trying to calculate it for Houston, they were counting equipment that was being warehoused to be shipped overseas. Equipment which was not being operated and not contributing to air emissions was being included. That is one of the messages that came out. If your company is headquartered in Charlotte, and if you register all your equipment in Charlotte but it never operates there and is operated in the rural counties, you are hurting the air quality budget for Charlotte. And all for no reason. So think about where you use your equipment when you register it. Register it where it operates. Those are the kind of things that are ongoing. Those are being nationally driven. That's the kind of thing that's going to help us all to understand how to comply with the intent.

Ms. Szlosberg asked Mr. Jenkins if his organization tracks any numbers for upfits that have been made to try to scrub emissions on equipment that has been on the ground and in use for 50 years or more? Does the AGC track equipment that is out there, who has been doing retrofits, etc.? Mr. Jenkins replied equipment manufacturers track their own equipment, but ACG does not. Carolina Tractor and Gregory Poole are very much involved in tracking their equipment. That is a major customer base for them and they are very much involved in this. He then stated that you could track contractors that use retrofitted equipment.

Ms. Szlosberg commented that that could be a measurement. NCDOT could ask contractors to use equipment which meets a certain air quality standard and blend that into our thinking. In essence it affects our bottom line because in these large areas that are teetering on the conformity line, it may be something that kicks it over. We need to encourage a certain kind of equipment that has a positive air quality effect and puts money in our pockets.

Ms. Szlosberg thanked Mr. DeWitt and concluded that his walk away tasks were to engage in the national dialogue and keep thinking about how we can keep pushing forward regarding the use of Green Contracting and how we can measure what we are doing.

Ms. Szlosberg asked if there was any other new business which needed to be discussed.

Ms. Szlosberg asked Mr. Mike Bruff, Manager of the Transportation Planning Branch, about a previously requested report on the conformity issue measurements on the regionally significant projects from the long range plans. Mr. Bruff replied that he could provide those reports to the BOT by morning. He stated that his staff has put together all the regionally significant projects from the long range plans for each Board Member.

Ms. Nancy Dunn asked about there being lots of concerns because we didn't know what the draft TIP was going to look like and you couldn't move until you knew that. She inquired as to whether that analysis been done based on new information? Mr. Bruff replied that he had worked with Ms. Debbie Barbour, Director of Pre-Construction, to look at the draft TIP and work through any issues that were there. Ms. Dunn asked if, in general, folks are no worse off than they were before. Mr. Bruff responded that is correct. NCDOT was very careful to add any project that was regionally significant that might have impacted air quality and let Ms. Barbour know which projects could and could not move. As a result, we do know where we are as far as what we are going to have to do as result of the draft TIP. We are not looking at any lapses due to the TIP.

Mr. Greg Smith of NCDOT's Geotechnical Unit, informed the EPPC of the upcoming Environmental Stewardship in Transportation Conference this July in Charlotte which will be jointly hosted by NCDOT and the NC Department of Environment and Natural Resources. It will focus on waste minimization, recycling, and EMSs. Many of the issues Mr. DeWitt discussed will be addressed at the conference. Mr. Smith offered to provide additional information to the EPPC and to provide a follow-up presentation after the conference.

Seeing no further questions, Ms. Szlosberg adjourned the meeting at 9:30 A.M.

The next meeting for the Environmental Planning and Policy Committee is scheduled for Wednesday, May 4, 2005 at 8:30 A.M. in the Board of Transportation Room (Room 150) of the Transportation Building.

NS/blc